	SUBJECT		DATE
1056. 1057. 1058. 1059.	PCB Reporting and Recordkeeping Relief Commercial Chemical Products and Unused Batteries PCB Annual Records Retention Timeframes Satellite Accumulation within a <90-day Accumulation Area	ENCORE ENCORE	JAN 12, 2014 JAN 16, 2014 JAN 31, 2014 FEB 7, 2014
1060. 1061. 1062.	PCB Certificate of Disposal Relief Used Oil and Weekly Inspections Bags and RCRA Container Definition	ENCORE	FEB 13, 2014 FEB 20, 2014 FEB 27, 2014
1063. 1064. 1065. 1066. 1067.	Product Storage Tank Residues and Hazardous Waste Regulations Spent Lead-Acid Batteries and Accumulation Time Limits Land Disposal Restrictions and Dates of Accumulation Universal Waste Accumulation Time Limits and the One Year Rule PCB Manifest Discrepancy Reports and Estimated Waste Weights	ENCORE	MAR 6, 2014 MAR 13, 2014 MAR 23, 2014 MAR 29, 2014 APR 6, 2014
1068. 1069. 1070.	PCB Wastes, Independent Transporters and Confirmation of Receipt Paint Wastes and The Applicability of the F001-F005 Listings to Ingredients Other Paint Wastes and the Applicability of the F001-F005 Listings	ENCORE ENCORE	APR 10, 2014 APR 20, 2014 APR 24, 2014
1071. 1072. 1073.	Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents TSCA "No PCBs" versus "Non-PCBs" versus "Nondetectable PCBs" Purpose of Keeping a Hazardous Waste Container Closed	ENCORE ENCORE	MAY 1, 2014 MAY 8, 2014 MAY 15, 2014
1074. 1075. 1076.	PCB Containers and Multiple Removed From Service Dates Satellite Accumulation and RCRA Personnel Training Transporter Signatures on Hazardous Waste Manifest and Multiple Drivers	LINOUTE	MAY 22, 2014 MAY 29, 2014 JUN 5, 2014
1077. 1078. 1079.	Universal Waste and Nonhazardous Batteries Universal Waste and Incandescent Bulbs The PCB Mark and the Fields "Also Contact" and "Tel No"	ENCORE	JUN 12, 2014 JUN 19, 2014 JUN 29, 2014
1080. 1081. 1082.	Halon Fire Extinguishers - Banned or Not Banned? Cabinets as RCRA Containers LDR Storage Prohibitions and Treated Wastes	ENCORE ENCORE ENCORE	JUL 5, 2014 JUL 13, 2014 JUL 17, 2014
1083. 1084. 1085. 1086. 1087.	LDR Treatment Standards and F001 "Chlorinated Fluorocarbons" RCRA Regulatory Status of Chlorinated Fluorocarbons Used as Refrigerants Universal Wastes, Manifesting and DOT Shipping Names CERCLA Hazardous Substances – A Brief Definition CERCLA Hazardous Substances – The Petroleum Exclusion	ENCORE ENCORE	JUL 24, 2014 JUL 31, 2014 AUG 7, 2014 AUG 14, 2014 AUG 21, 2014
1088. 1089. 1090.	PCB Concentration Assumptions for Use vs. PCB Disposal Universal Waste and Basis for the One Year Accumulation Time Limit Product Spills and Waste Determinations	ENCORE ENCORE	AUG 28, 2014 SEP 4, 2014 SEP 11, 2014
1091. 1092.	PCB Concentrations and 10,000 PPM PCB Concentrations and 1,000 PPM		SEP 18, 2014 SEP 25, 2014

TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

FROM: PAUL W. MARTIN, Senior Environmental Compliance Officer

CHPRC Environmental Protection, Hanford, WA

SUBJECT: PCB CONCENTRATIONS AND 1,000 PPM

DATE: *SEPTEMBER* 25, 2014

CHPRC Projects	CH PRC - Env.	MSA	Hanford Laboratories	Other Hanford	Other Hanford
	Protection			Contractors	Contractors
Richard Austin		Jerry Cammann	Alan Campbell		
Tania Bates	Brett Barnes	Jeff Ehlis	Grant McCalmant	Bill Bachmann	Glen Triner
Ty Blackford	Ron Brunke	Garin Erickson		Dean Baker	Greg Varljen
Bob Cathel	Bill Cox	Lori Fritz	DOE RL, ORP, WIPP	Scott Baker	Julie Waddoups
Rene Catlow	Lorna Dittmer	Panfilo Gonzales Jr.		Lucinda Borneman	Kyle Webster
Richard Clinton	Rick Engelmann	Darlene Hagel	Mary Beth Burandt	Paul Crane	Ted Wooley
Larry Cole	Jim Leary	Dashia Huff	Cliff Clark	Tina Crane	-
John Dent	Dale McKenney	Mark Kamberg	Mike Collins	Greta Davis	
Brian Dixon	Rick Oldham	Edwin Lamm	Tony McKarns	Jeff DeLine	
Eric Erpenbeck	Linda Petersen	Candice Marple	Ellen Mattlin	Ron Del Mar	
Tom Gilmore	Fred Ruck	Saul Martinez	Greg Sinton	John Dorian	
Stuart Hildreth	Jennie Seaver	Matt Mills	Scott Stubblebine	Mark Ellefson	
Mike Jennings	Wayne Toebe	Anthony Nagel		Darrin Faulk	
Stephanie Johansen	Lee Tuott	Jennifer Ollero		Joe Fritts	
Dan Kimball	Daniel Turlington	Jon Perry		Rob Gregory	
Jeanne Kisielnicki	Dave Watson	Thomas Pysto		Gene Grohs	
Melvin Lakes	Joel Williams	Phillip Rogers		James Hamilton	
Jim McGrogan		Don Rokkan		Andy Hobbs	
Stuart Mortensen		Lana Strickling		Ryan Johnson	
Dean Nester		Lou Upton		Megan Lerchen	
Dave Richards		Christina Zerby		Richard Lipinski	
Phil Sheely				Charles (Mike) Lowery	
Connie Simiele				Michael Madison	
Roni Swan				Terri Mars	
Michael Waters				Cary Martin	
Jeff Westcott				Steve Metzger	
Jeff Widney				Tony Miskho	
				Tom Moon	
				Chuck Mulkey	
				Judith Nielsen	
				Mandy Pascual	
				Kirk Peterson	
				Jean Quigley	
				Mark Rollison	
				Dan Saueressig	
				Merrie Schilperoort Joelle Stamm	
				Joene Stainin	

TWO MINUTE TRAINING

SUBJECT: PCB Concentrations and 1,000 PPM

Q: Last week's "Two Minute Training" (2MT) addressed that most customers know the significance of the concentration ≥50 ppm PCB waste, i.e., it is PCB regulated, and that there are instances of regulated PCB waste with concentrations at or near 10,000 ppm. So what about the next concentration level - are there any instances of regulated PCB wastes with concentrations at or near 1,000 ppm that can be subject to other specific requirements of 40 CFR 761?

A: Yes there are!

40 CFR 761.30(a)(2)(v)(A) and 40 CFR 761.30(h)(2)(v)(A) concern removal of free-flowing PCB dielectric fluid from transformers, electromagnets, switches, or voltage regulators. Flushing of the equipment is not required. Either test the fluid or assume it contains $\geq 1,000$ ppm PCBs.

40 CFR 761.30(b)(1) concerns the prohibition on the use of railroad transformers that contain dielectric fluids with a PCB concentration of >1,000 ppm. 40 CFR 761.30(b)(2)(ii) states that after January 1, 1984, railroad transformers may only be serviced with dielectric fluid containing <1,000 ppm PCB.

40 CFR 761.60(b)(3)(ii) concerns PCB hydraulic machines and the removal and disposal of free-flowing liquid. If the PCB liquid contains ≥1,000 ppm PCB, then the hydraulic machine must be decontaminated or flushed prior to disposal with an approved solvent that contains <50 ppm PCB.

These were the only five citations referencing "1,000 ppm" PCBs in 40 CFR 761.

SUMMARY:

- PCB wastes are generally regulated if the PCB concentration is \geq 50 ppm.
- PCB wastes can have specific requirements if concentrations are in the 1,000 ppm range.
- There are five citations referencing PCB concentrations at or near 1,000 ppm and all address PCB liquids in terms of removal, disposal, use, servicing or decontamination.

Excerpts from 40 CFR 761.30 and 40 CFR 761.60 are attached to the e-mail. If you have any questions, please contact me at "Paul_W_Martin@rl.gov" or at (509) 376-6620.

FROM: Paul W. Martin **DATE:** 9/25/14 **FILE:** c:\...\2MT\2014\091414.rtf **PG:** 1

TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: PCB Concentrations and 1,000 PPM

40 CFR §761.30 Authorizations

The following non-totally enclosed PCB activities are authorized pursuant to section 6(e)(2)(B) of TSCA:

- (a) *Use in and servicing of transformers (other than railroad transformers)*. PCBs at any concentration may be used in transformers (other than in railroad locomotives and self-propelled railroad cars) and may be used for purposes of servicing including rebuilding these transformers for the remainder of their useful lives, subject to the following conditions:
 - (2) Servicing conditions.
 - (v) You may reclassify a PCB Transformer that has been tested and determined to have a concentration of \geq 500 ppm PCBs to a PCB-Contaminated transformer (\geq 50 but <500 ppm) or to a non-PCB transformer (<50 ppm), and you may reclassify a PCB-Contaminated transformer that has been tested and determined to have a concentration of \geq 50 ppm but <500 ppm to a non-PCB transformer, as follows:
 - (A) Remove the free-flowing PCB dielectric fluid from the transformer. Flushing is not required. Either test the fluid or assume it contains ≥1,000 ppm PCBs. Retrofill the transformer with fluid containing known PCB levels according to the following table. Determine the transformer's reclassified status according to the following table (if following this process does not result in the reclassified status you desire, you may repeat the process):
- (b) *Use in and servicing of railroad transformers*. PCBs may be used in transformers in railroad locomotives or railroad self-propelled cars ("railroad transformers") and may be processed and distributed in commerce for purposes of servicing these transformers in a manner other than a totally enclosed manner subject to the following conditions:
 - (1) *Use restrictions*. After July 1, 1986, use of railroad transformers that contain dielectric fluids with a PCB concentration **>1,000 ppm** is prohibited.
 - (2) Servicing restrictions.
 - (ii) After January 1, 1984, railroad transformers may only be serviced with dielectric fluid containing less than **1,000 ppm** PCB, except as provided in paragraph (b)(2)(i) of this section;

FROM: Paul W. Martin **DATE:** 9/25/14 **FILE:** c:\...\2MT\2014\091414.rtf **PG:** 2

TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: PCB Concentrations and 1,000 PPM

40 CFR §761.30 Authorizations

- (h) *Use in and servicing of electromagnets, switches and voltage regulators.* PCBs at any concentration may be used in electromagnets, switches (including sectionalizers and motor starters), and voltage regulators and may be used for purposes of servicing this equipment (including rebuilding) for the remainder of their useful lives, subject to the following conditions:
 - (2) Servicing conditions.
 - (v) You may reclassify an electromagnet, switch, or voltage regulator that has been tested and determined to have a concentration of \geq 500 ppm PCBs to PCB-Contaminated status (\geq 50 but <500 ppm) or to non-PCB status (<50 ppm), and you may reclassify a PCB-Contaminated electromagnet, switch, or voltage regulator that has been tested and determined to have a concentration of \geq 50 ppm but <500 ppm to a non-PCB status, as follows:
 - (A) Remove the free-flowing PCB dielectric fluid from the electromagnet, switch, or voltage regulator. Flushing is not required. Either test the fluid or assume it contains ≥1,000 ppm PCBs. Retrofill the electromagnet, switch, or voltage regulator with fluid containing known PCB levels according to the following table. Determine the electromagnet, switch, or voltage regulator's reclassified status according to the following table (if following this process does not result in the reclassified status you desire, you may repeat the process):

40 CFR §761.60 Disposal requirements

- (b) *PCB Articles*. This paragraph does not authorize disposal that is otherwise prohibited in §761.20 or elsewhere in this part.
 - (3) PCB hydraulic machines.
 - (i) Any person disposing of PCB hydraulic machines containing PCBs at concentrations of \geq 50 ppm, such as die casting machines shall do so by one of the following methods:
 - (A) In accordance with §761.79.
 - (B) In a facility which is permitted, licensed, or registered by a State to manage municipal solid waste subject to part 258 of this chapter or non-municipal non-hazardous waste subject to \$\$257.5 through 257.30 of this chapter, as applicable (excluding thermal treatment units).
 - (C) In a scrap metal recovery oven or smelter operating in compliance with §761.72.
 - (D) In a disposal facility approved under this part.
 - (ii) All free-flowing liquid must be removed from each machine and the liquid must be disposed of in accordance with the provisions of paragraph (a) of this section. If the PCB liquid contains ≥1,000 ppm PCB, then the hydraulic machine must be decontaminated in accordance with §761.79 or flushed prior to disposal with a solvent listed at paragraph (b)(1)(i)(B) of this section which contains <50 ppm PCB. The solvent must be disposed of in accordance with paragraph (a) of this section or §761.79.

FROM: Paul W. Martin **DATE:** 9/25/14 **FILE:** c:\...\2MT\2014\091414.rtf **PG:** 3